

REMARKS

The Applicant respectfully requests further examination and reconsideration in view of the amendments above and the arguments set forth fully below. Claims 1-32 were previously pending in this application. Within the Office Action, claims 1-32 have been rejected. By the above amendment, claims 1, 9, 17, and 25 have been amended. Accordingly, claims 1-32 are currently pending.

Rejections under 35 U.S.C. §102(e)

Claims 1-32 have been rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,253,188 issued to Witek et al. (hereafter "Witek").

Witek teaches a system and method for providing classified ads over the Internet. Internet users can connect to a Newspaper web server and central Web application server to search for and obtain classified ads. Ad records are stored in ad database servers 20 for providing classified ad records on request to application servers 16. To search the ad records, the search process is divided into two principle parts. The first part includes a system entry and pre-selection sequence, and the second part includes a record selection sequence (Witek, col. 12, lines 10-13). More specifically, in the first part the user enters the system and specifies the category of classified ads to be searched. Thereafter, as the user navigates to the respective selected category, the user further specifies a subcategory for the particular category selected (Witek, col. 12, lines 27-37). The selected category and subcategory pair is identified by a category/subcategory ID 46. The second part of the search process includes entering a formal record selection query containing the specific parameters for the ad records the user wishes to see. The specific parameters are entered as primary selection parameters 60 (also referred to as primary selection parameters 142 in Figure 10) and as secondary selection parameters 62 (also referred to as secondary selection parameters 144 in Figure 10). The user manually inputs values into each desired field of the primary and secondary selection parameters 60 (142) and 62 (144).

Within the Office Action, it is stated that Witek teaches an external application different than the research system accessing one or more nodes within the directory tree structure and obtaining data from the one or more nodes by utilizing an applications programming interface (API) associated with the research system. To support this assertion, Figure 2, element 22, column 11, lines 48-57, and the interface in Figure 10 of Witek are cited. Column 2, lines 48-57 of Witek describe Figure 2 which includes a newspaper ad record database server 20 connected to application server 16, and application server 16 and users 22 connected to the internet 14.

Figure 10 of Witek illustrates an interface used by user 22 to input data used by the server 16 to search the database 20. However, as is the case with conventional browsers, data input by a user via a browser user interface is entered onto an HTML form. This form, including the input data, is then transmitted to a web server that originally provided the HTML form. In the system of Witek, data input using the user interface of Figure 10 is transmitted as an HTML form from user 22 (Witek, Figure 2) to the server 16 (Witek, Figure 2). The server 16 must then parse the transmitted form to retrieve the input data. The retrieved data is then properly formatted by the classified ad application on the server 16 to query the database 20. The browser used by user 22 does not format a query which is used directly by the server 16 to query the database 20. In contrast, the present invention provides an API which is used by an external application, such that the external application formats a query that is used directly by a research system.

Amended independent claim 1 is directed to a method of accessing data within a research system by an application external to the electronic system. The method comprises formatting a searchable database within the research system into a directory tree structure, wherein the directory tree structure includes nodes comprising related data and branches comprising links between the nodes, wherein each related item of data is categorized by a navigation path through the directory tree structure and by one or more parameters, each parameter is set with a corresponding value associated with the data item thereby forming a set parameter, wherein the parameters are specific to the node in which the related data is included, and an external application different than the research system accessing one or more nodes within the directory tree structure and obtaining data from the one or more nodes by utilizing an applications programming interface (API) associated with the research system, wherein the external application formats a query using the API such that the formatted query is used directly by the research system to access the directory tree structure and obtain data from the searchable database specified by the external application query. As discussed above, Witek does not teach a query formatted by the external application using an API, where the formatted query is used directly by the research system. For at least these reasons, the independent claim 1 is allowable over the teachings of Witek.

Claims 2-8 depend on the independent claim 1. As described above, the independent claim 1 is allowable over the teachings of Witek. Accordingly, claims 2-8 are all also allowable as being dependent on an allowable base claim.

Amended independent claim 9 is directed to research system for providing access to a searchable database by an application external to the research system. The research system

comprises means for formatting the searchable database into a directory tree structure, wherein the directory tree structure includes nodes comprising related data and branches comprising links between the nodes, wherein each related item of data is categorized by a navigation path through the directory tree structure and by one or more parameters, each parameter is set with a corresponding value associated with the data item thereby forming a set parameter, wherein the parameters are specific to the node in which the related data is included, and means for an external application different than the research system accessing one or more nodes within the directory tree structure and obtaining data from the one or more nodes by utilizing an applications programming interface (API) associated with the research system, wherein the external application formats a query using the API such that the formatted query is used directly by the research system to access the directory tree structure and obtain data from the searchable database specified by the external application query. As discussed above, Witek does not teach a query formatted by the external application using an API, where the formatted query is used directly by the research system. For at least these reasons, the independent claim 9 is allowable over the teachings of Witek.

Claims 10-16 depend on the independent claim 9. As described above, the independent claim 9 is allowable over the teachings of Witek. Accordingly, claims 10-16 are all also allowable as being dependent on an allowable base claim.

Amended independent claim 17 is directed to research system for providing access to a searchable database by an application external to the research system. The research system comprises a research server configured to format the searchable database into a directory tree structure, wherein the directory tree structure includes nodes comprising related data and branches comprising links between the nodes, wherein each related item of data is categorized by a navigation path through the directory tree structure and by one or more parameters, each parameter is set with a corresponding value associated with the data item thereby forming a set parameter, wherein the parameters are specific to the node in which the related data is included, and an external application different than the research system to access one or more nodes within the directory tree structure and to obtain data from the one or more nodes by utilizing an applications programming interface (API) associated with the research system, wherein the external application formats a query using the API such that the formatted query is used directly by the research system to access the directory tree structure and obtain data from the searchable database specified by the external application query. As discussed above, Witek does not teach a query formatted by the external application using an API, where the formatted query is used

directly by the research system. For at least these reasons, the independent claim 17 is allowable over the teachings of Witek.

Claims 18-24 depend on the independent claim 17. As described above, the independent claim 17 is allowable over the teachings of Witek. Accordingly, claims 18-24 are all also allowable as being dependent on an allowable base claim.

Amended independent claim 25 is directed to network of devices for providing access to a searchable database by an application external to the research system. The network of devices comprises one or more computer systems configured to establish a connection with other systems, and a research server coupled to the one or more computer systems to format the searchable database into a directory tree structure, wherein the directory tree structure includes nodes comprising related data and branches comprising links between the nodes, wherein each related item of data is categorized by a navigation path through the directory tree structure and by one or more parameters, each parameter is set with a corresponding value associated with the data item thereby forming a set parameter, wherein the parameters are specific to the node in which the related data is included, and an external application different than the research system to access one or more nodes within the directory tree structure and to obtain data from the one or more nodes by utilizing an applications programming interface (API) associated with the research system, wherein the external application formats a query using the API such that the formatted query is used directly by the research system to access the directory tree structure and obtain data from the searchable database specified by the external application query. As discussed above, Witek does not teach a query formatted by the external application using an API, where the formatted query is used directly by the research system. For at least these reasons, the independent claim 25 is allowable over the teachings of Witek.

Claims 26-30 depend on the independent claim 25. As described above, the independent claim 25 is allowable over the teachings of Witek. Accordingly, claims 26-30 are all also allowable as being dependent on an allowable base claim.

Witek does not teach accessing a node within the directory tree structure using a query string. Witek teaches searching a database according to a user query, where the user query comprises a number of documents desired (Witek, field 154 in Figure 10), primary selection parameters 142, and secondary selection parameters 144 that include yes-no parameters 146 and keyword search parameters 148 (Witek, Figure 10). A query is not the same as a query string. As described above, the user query of Witek is nothing more than entering the search parameters used in the second part of the search process. The second part of the search process includes the

parametric search and the keyword search using the value input into each field by the user. Data input by the user into designated parameter field boxes (items 142, 146, and 148) is a necessary step to performing a parametric search and/or a keyword search, as is well known in the art.

In contrast, a query string as claimed in the present invention is described as a command string written in a specific query language. The query string designates at least the navigation through the directory tree structure to access a specific node or a discrete data item within the directory (Specification, page 30, lines 26-27). The structure of the query language of the present invention is preferably similar to that of SQL (structured query language), but it is specific to the combined technologies of accessing the directory tree structure and setting parameters for a search (Specification, page 31, lines 6-8). Further, the independent claim 31 of the present application claim a query string, where the query string defines a navigation path through the directory tree structure to access a specific node within the directory tree structure. Clearly, the query string of the present invention defines the results of a search process, that is the specific node defined by its path through the directory tree structure. The user query of Witek defines search parameters to be used in a subsequent keyword search.

On page 3 of the Office Action, it is stated that Witek teaches “users access the directory by a query” and that this is the same as the claimed limitation “accessing a node within the directory tree structure using a query string”. As discussed above, a query and a query string are not the same. As such, Witek does not teach accessing a node using a query string, as claimed within the present application.

Independent claim 31 is directed to a method of accessing data within a research system by an application external to the research system. The method comprises formatting a searchable database within the research system into a directory tree structure, wherein the directory tree structure includes nodes comprising related data and branches comprising links between the nodes, wherein each related item of data is categorized by a navigation path through the directory tree structure and by one or more parameters, each parameter is set with a corresponding value associated with the data item thereby forming a set parameter, wherein the parameters are specific to the node in which the related data is included, and an external application different than the research system accessing one or more nodes within the directory tree structure and obtaining data from the one or more nodes by utilizing an applications programming interface (API) associated with the research system, wherein the applications programming interface accesses the one or more nodes within the directory tree structure using a query string defining a navigation path through the directory tree structure to access a specific node within the directory

tree structure. As discussed above, Witek does not teach using a query string to access a specific node within the directory tree structure. For at least these reasons, the independent claim 31 is allowable over the teachings of Witek.

Within the Office Action, it is stated that Witek teaches a dichotomous key search. To support this assertion, Figure 3, element 70, and column 16, lines 27-50 are cited. The Applicant respectfully disagrees with this conclusion. Column 16, lines 27-50 of Witek refer to a mapped field 70 within the secondary selection parameters 62. Witek teaches that the mapped fields 70 are “yes-no” secondary features that provide details concerning the ad record subject matter. In particular, Witek teaches that the yes-no fields 70 provide up to 32 features which the user can simply check off in a selection menu (such as element 146 in Figure 10) to further describe the ad to be viewed. However, this is no different than a parametric search in which the parameters are limited to yes or no. Within the Office Action, it is stated that the present specification defines a “dichotomous key search” as the ability to instruct users through an answer and question dialog, often yes or no answers, and that Witek also gives the user the option of answering questions by checking the boxes in the selection menu. It is therefore concluded within the Office Action that these two search options are the same. The Applicant respectfully disagrees with the conclusion that the selection menu 146 including yes-no fields 70 of Witek is the same as a dichotomous key search as described in the present application.

On page 18, lines 6-10, the present specification defines a dichotomous key search as:

“A dichotomous key structure is a binary key structure or two-node tree. This structure is used as a decision tree mechanism to instruct users in deciphering information given in an answer or question dialog, often a yes or no answer. Examples of this include diagnosing a medical disease, diagnosing a mechanical problem, and working a system such as classifying a biological species by physical attributes.”

A decision tree mechanism is well known in the art as a mechanism for progressively moving down a directory tree structure. Movement down the directory tree structure is accomplished by making successive decisions related to posed questions, such as the above described answer or question dialog. This process is similar to that of successively selecting a category from a directory menu, and then selecting a subcategory from the selected category, and so on, to move down an hierarchical directory structure. However, the dichotomous key search differs from the category search, or hierarchical search, by structuring the progression down the directory tree

structure in a binary manner. Where a category progression provides multiple options at any given selection opportunity, a dichotomous key progression is specifically configured to provide only two options at any given selection opportunity. Such a structure is represented as a “binary key structure” or a “two-node tree”.

The yes-no fields 70 of Witek are all selected as a single grouping, that is each yes-no field is considered a single parameter within a parametric search. The user selects all desired yes-no fields 70, and then, within a single search step, a search is performed using all selected yes-no fields 70 plus all other input parameters 68, 72 (Figure 3 of Witek), and 142 (Figure 10 of Witek). In contrast, a dichotomous key search, as applied to the present invention, is a succession of searching steps, where each search step divides the remaining database into two based on the user response to a single question. Each search step first requires a user response. The search is then performed, and another user response is then required before a successive search is performed (Specification, Figure 6; page 30, lines 5-24). An example is given on page 30, lines 1-4 of the present specification. In this example, one such use of a dichotomous key search is at the node for “fiction”, the dichotomous key selections are “fiction books” and “fiction other than books”, or at the node for “Mercedes-Benz” and the dichotomous key selections are “Mercedes-Benz Dealers” and “Mercedes-Benz Models”. On page 28, lines 16-20 of the present specification, a difference between conventional, or category-configured, directory structures and dichotomous key structures is given:

“In conventional directory structures, where there are multiple entries per node, users can easily become lost. As directories grow and become more complicated, decisions become more difficult and choosing between two paths associated with a dichotomous key structure versus many paths associated with directory structures is simpler. Therefore, the dichotomous tree structure improves ease of use for the user.”

As such, Witek does not teach a dichotomous key search.

Independent claim 32 is directed to a method of accessing data within a research system by an application external to the research system. The method comprises formatting a searchable database within the electronic system into a directory tree structure, wherein the directory tree structure includes nodes comprising related data and branches comprising links between the nodes, wherein each related item of data is categorized by a navigation path through the directory tree structure and by one or more parameters, each parameter is set with a corresponding value

associated with the data item thereby forming a set parameter, wherein the parameters are specific to the node in which the related data is included, and an external application different than the research system accessing one or more nodes within the directory tree structure and obtaining data from the one or more nodes by utilizing an applications programming interface (API) associated with the research system, wherein accessing one or more nodes is performed utilizing a search module, the search module includes a keyword search capability, a hierarchical search capability, a dichotomous key search capability, and a parametric search capability. As discussed above, Witek does not teach using a search module including a dichotomous key search capability. For at least these reasons, the independent claim 32 is allowable over the teachings of Witek.

For the reasons given above, Applicant respectfully submits that claims 1-32 are now in a condition for allowance, and allowance at an early date would be appreciated. Should the Examiner have any questions or comments, he/she is encouraged to call the undersigned attorney at (408) 530-9700.

Respectfully submitted,
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